

PACKAGED ROOF TOP AIR COOLED UNIT

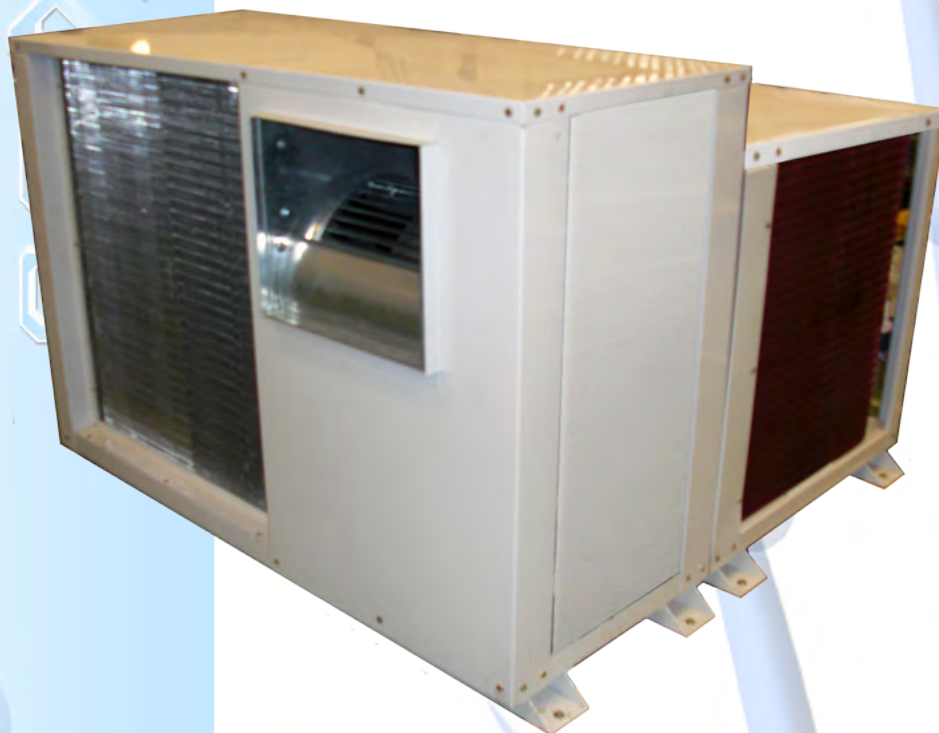
TYPE: ROOF TOP UNIT

MODEL: PNSA-RT C/H

CAPACITY: 5.0 to 33.3 Nominal Tons

60,000 to 400,000 BtuH

17.6 to 117.2 KW



Description:

- The PNSA-RT units are single package air cooled air conditioners.
- The PNSA-RT series includes 11 models of cooling and heating.
- PNSA-RT for cooling only.
- PNSA-RTJ for cooling and heating.
- Suitable for outdoor installation either on a roof or at ground floor.
- Completed with pipe, wiring and refrigerant charging from the factory.

Features/Benefits

- Wide range of indoor airflows.
- Solid foundation to protect the unit during shipment and rigging holes for overhead crane.
- Electrical supply connections and knockouts provided.
- Multiple refrigeration circuits.
- Durable construction.
- Low noise.
- Hermetic compressors for model 006 to 024.
- Semi-hermetic compressors for model 030 and 040.
- HP and LP cut-out switches.
- Air filters.
- Electrical panel.

GUIDE SPECIFICATION

GENERAL

The PNSA-RT air cooled single packaged air conditioners shall be completely factory assembled, leak tested, evacuated and fully-charged with R-22, ready for installation.

UNIT CASING

The unit shall be constructed from elector galvanized steel. The exterior panels shall be acoustically lined with 1/2 thick, 40 kg/cu.m. Fiber glass insulation. The insulation shall be affixed to the casing with the water proof adhesive. All steel metal parts shall be degreased, zinc phosphate bonderized before begin oven-baked with a thick coat of polyester paint.

COMPRESSOR

Unit model 006 to 024 shall have Scroll hermetic compressor(s). Unitmodel 030 to 040 shall have Semihermetic Reciprocating compressors. All compressors are mounted on vibration isolators. The refrigerant gas cooled, high torque motor, quiet running with internal suspension system to eliminate vibration, and internal linebreak motor protection and motor overheating.

AIR COOLED CONDENSER

Coils shall be internally enhanced, seamless copper tubes, mechanically expanded into aluminium fins with full height collars. Coil shall be leak tested at 350 psig from factory. Fan shall be dynamically and statically balanced, direct drive, providing vertical air discharge from extended orifices for efficiency and low noise. Guards of heavy gauge , PVC (polyvinyl chloride) coated or galvanized steel. Fan motors shall be high efficiency, direct drive and current protected. Rigid mounted with permanently lubricated.

EVAPORATOR COIL

The direct expansion evaporator shall consist of full face coil with counterflow circuits, seamless 3/8 inch OD staggered copper tubes mechanically bonded into aluminium fins with a maximum of 14 fins per inch. Each coil shall be degreased internally and externally, brazed in nitrogen atmosphere, leak tested at 350 psig and completely dehydrated before assembly.

EVAPORATOR BLOWER

The evaporator blower shall be the double inlet, forward curved centrifugal type and statically and dynamically balanced.

EVAPORATOR MOTOR

A choice of evaporator blower motor is available for field installation to meet any application requirement. Motor is mounted within the insulated cabinet of the unit to minimize the transmission of sound to the surrounding space.

BELT DRIVE

The belt drive combined with an adjustable motor pulley and blower RPM allows the airflow to be adjusted to meet the CFM requirement of the system.

REFRIGERANT CIRCUIT

The refrigerant circuit shall be factory piped, leak tested and pre-charged with R-22. Each refrigerant circuit shall consist of a compressor, capillary tube or expansion valve and service valve.

UNIT CONTROL

Each system shall contain factory mounted wired and tested controls required to operate and protect the unit. The control system shall include compressor overload protection, motor winding protection, high and low pressure cutouts to guard against compressor damage due to high discharge head pressure and system leakage.

PHYSICAL DATA & ELECTRICAL DATA

MODEL :PNSA-RT C / H		006	008	009	010	012	016	018	020	024	030	040
Cooling Capacity	BTUH	60,000	80,000	92,000	108,000	120,000	160,000	184,000	216,000	240,000	300,000	400,000
	Tons	5.00	6.67	7.67	9.00	10.00	13.33	15.33	18.00	20.00	25.00	33.33
	kW	17.6	23.4	27.0	31.6	35.2	46.9	53.9	63.3	70.3	87.9	117.2
Heating Capacity	BTUH	69,000	92,000	105,800	124,200	138,000	184,000	211,600	248,400	276,000	345,000	460,000
	Tons	5.75	7.67	8.82	10.35	11.50	15.33	17.63	20.70	23.00	28.75	38.33
	kW	20.2	27.0	31.0	36.4	40.4	53.9	62.0	72.9	80.9	101.1	134.8
Nominal Air Flow	CFM	2,000	2,700	3,100	3,600	4,000	5,300	6,100	7,200	8,000	10,000	13,300
	CMH	3,400	4,590	5,270	6,120	6,800	9,010	10,370	12,240	13,600	17,000	22,610
	L/S	940	1270	1460	1700	1880	2500	2870	3390	3770	4710	6260
Air Pressure Drop	Pa	150-250										
Condensing Unit												
Compressor Type		Scroll - Hermetic										Semi-Hermetic
Quantity		1	1	1	1	1	2	2	2	2	1	1
Refrigerant		R-22 (R-407C ON REQUEST ONLY)										
Power Supply		V/Ph/Hz [380 ~ 415V / 3P / 50Hz] [440 ~ 480V / 3P / 60Hz]										
Rated Current (Amps)	380V	10.00	16.40	17.30	19.20	19.60	16.4x2	17.3x2	19.2x2	19.6x2	52.10	75.70
	415V	9.2	15.0	15.8	17.6	17.9	15.0x2	15.8x2	17.6x2	17.9x2	47.7	69.3
	440V	8.6	14.2	14.9	16.6	16.9	14.2x2	14.9x2	16.6x2	16.9x2	45.0	65.4
	460V	8.3	13.5	14.3	15.9	16.2	13.5x2	14.3x2	15.9x2	16.2x2	43.0	62.5
	480V	7.9	13.0	13.7	15.2	15.5	13.0x2	13.7x2	15.2x2	15.5x2	41.2	59.9
Power Input	kW	5.25	6.88	7.89	9.11	10.18	6.88x2	7.89x2	9.11x2	10.18x2	33.31	46.09
Condenser Fan Motor	HP	3/4	3/4	3/4	1/3	1/3	3/4	3/4	3/4	1	1	1
Condenser Fan Type		PROPELLER										
Condenser Type		COPPER TUBE AND ALUMINIUM FINS / COPPER FINS										
Evaporator												
Evaporator Type		COPPER TUBE AND ALUMINIUM FINS / COPPER FINS										
Blower Motor	HP	1	1	2	2	2	2	3	3	5	7.5	10
	Amps	2	2	3.6	3.6	3.6	3.6	5.2	5.2	8.4	12	16
	QTY	1	1	1	1	1	1	1	1	1	1	1
Weight *	KG	170	300	360	480	520	660	780	820	970	1,100	1,250

CAPACITY BASED ON 27 ° CDB, 19 ° CWB AIR ENTERING.

35 ° C AMBIENT TEMP. AND 7 ° C SUCTION TEMP.

Temperature: 1 ° C = 33.8 ° F

1 ° F = -17.2 ° C

Air Flow: 1 CFM = 1.699011 CMH

*Note: For Stainless Steel Unit, The Weight Will Be Standart Weight x 1.57 Times.